

DOCUMENT RESUME

ED 428 020

SO 029 942

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TITLE The Effects of Teacher Certification on Student Achievement of Music Instruction Goals and Objectives.
PUB DATE 1998-07-17
NOTE 58p.; M.A. Thesis, Salem-Teikyo University.
PUB TYPE Dissertations/Theses - Masters Theses (042)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Classroom Research; Comparative Analysis; Elementary Education; Grade 2; Grade 4; *Instructional Effectiveness; *Music Education; Pretests Posttests; *Teacher Certification; *Teacher Role
IDENTIFIERS *Curriculum Specialists; Harrison County Schools WV; T Test

ABSTRACT

This study focused on the extent to which teacher certifications influence student achievement in the elementary music curriculum. It examined the roles of music specialists, classroom teachers, and visiting artists in the instruction of elementary school music, hypothesizing that students taught by a music specialist will attain higher achievement levels on their selected instructional goals and objectives than those who are taught by the regularly certified classroom teacher. It further hypothesized that the difference in achievement levels will be greater at fourth grade level than at second grade level. The study sample came from grades 2 and 4 at two north central West Virginia elementary schools--34 students from one school (Watson) and 29 students from the other school (Lumberport). Pretests and posttests accompanying the Silver Burdette Music series were administered. In the 12 weeks following the pretest, the classroom teachers at Lumberport and the specialist at Watson continued with their normal methods of music instruction; posttests were administered after this period. No significant differences were found in the second grade pretests, but the Watson second grade class scored significantly higher than the Lumberport second graders on the posttests. The Watson fourth graders scored significantly higher on the pretests, and a wider advantage was found for Watson students at the posttest level. Findings support music specialist instruction for a comprehensive music curriculum. Includes t-tests. Contains 44 references. Sample posttests are appended. (BT)

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THE EFFECTS OF TEACHER CERTIFICATION
ON STUDENT ACHIEVEMENT
OF
MUSIC INSTRUCTION GOALS AND OBJECTIVES

A Thesis

Presented to

The Faculty of the Master of Arts Degree Program
Salem-Teikyo University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

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Acknowledgements

This thesis is dedicated to Dr. Sharon Brisbin—a wonderful teacher and friend. Without her inspiration and encouragement, this dream would never have become reality.

I also must thank my husband and children, who were caring enough to “do without Mom”, as I became totally engrossed in my work. I love you all!

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Chapter I-- Introduction

During the Revolutionary War, second President, John Adams, wrote, "I must study politics . . . , that my sons may have liberty to study mathematics and philosophy, geography, natural history, and naval architecture, navigation, commerce, and agriculture, in order to give their children a right to study painting, poetry, music, architecture, statuary, tapestry, and porcelain"(Hoffer and Hoffer, 1982. p.7). With this statement, Adams foretold the diversification of the American education system. Even in this early stage of the development of this country, Americans valued music instruction. Hoffer and Hoffer (1982, p.4) added, "Why are music and the other fine arts so important? There are several reasons, but a most significant one is that music and the other arts represent a fundamental difference between existing and living."

Throughout history, formal music education has taken various forms. The multiplicity of approaches has resulted from a constantly changing educational philosophy (Caylor, 1972). The "Back-to Basics" movement and child-centered curricula are two examples of the wide vacillations in curricular emphasis. Administrators allocate funds to subject areas based on these wide shifts in educational focus, thus affecting the availability of what some consider non-essential courses. Since music and the other arts are traditionally considered outside of the core curriculum, these programs often are deleted or severely crippled.

Basic philosophies of school systems also determine who teaches the curriculum, how they teach it, and what is presented (Caylor, 1972). Historically, a major debate has centered on the broad goals of the music curriculum and the type of instructor who best can accomplish these goals. Music scholars and associations, after conducting a wealth of

research on both topics, have developed a case supporting music taught by certified music instructors as a part of the core curriculum. However, financial considerations and the conflicting opinions of administrators often have placed music instruction, if offered, in the hands of general educators. Advocates of quality music education continue to consider this form of instruction inadequate to accomplish the goals of a comprehensive curriculum. Hence, this study focuses on the extent to which teacher certifications influence student achievement in the elementary music curriculum.

The Statement of the Problem

This study examines the roles of music specialists, classroom teachers, and visiting artists in the instruction of elementary school music and attempts to determine the effects of teacher certification on student achievement. Achievement of second and fourth grade students at a school using classroom teachers for music instruction were compared with a similar school employing a music specialist. Both groups were evaluated on the accomplishment of selected West Virginia State Instructional Goals and Objectives by completing approved state instruments.

The Hypothesis

The hypothesis in this study is that students taught by a music specialist will attain higher achievement levels on the selected instructional goals and objectives than those students who are taught by the regularly certified classroom teacher. Further, the difference in achievement levels will be greater at the fourth grade level than in second grade.

Limitations

The sample group was limited to approximately sixty-five second and fourth

grade students from representative schools. The study examined the achievement levels on only six instructional goals evaluated during the 1997-98 school term. Both sample groups had access to the same materials, but different types of teachers led instruction. Extraneous variables may have factored in the validity of the results, such as subjects' prior musical training, private music lessons, or extracurricular involvement in musical activities.

Assumptions

The communities from which the sample groups were drawn are similar in population, socioeconomic status, geographic location, personal value systems, and educational emphasis. These second and fourth grade classes are representative of others of the same age group throughout the state of West Virginia. Evaluation techniques are valid and are based on state-approved music instructional goals and objectives. The data reported in this thesis are accurate and reliable.

Definition of Terms

Arts education—Education, including the subject areas of music, visual arts, dance, and drama, singularly and in combination.

Classroom teacher--An elementary educator who is responsible for presenting the broad basic curriculum to one group of children during a school year.

Discipline-based music education--A process of studying works of music from four “discipline” perspectives: Production (composition, improvisation, and performance), history, aesthetics, and criticism (Patchen, 1996, p.17).

Generalist--Another term for classroom teacher.

Grade teacher--Classroom teacher.

Music consultant--Musically certified specialists who possess expertise in music and who are responsible for helping classroom teachers to teach music.

Music education--An organized, sequential music curriculum for the public schools.

Music specialist--An educator certified in the subject area of music. Approximately one-half of courses taken at the undergraduate level directly pertain to methods and subject matter to be used in a music teaching position.

Music supervisor--A person who works with music teachers as an administrator. This person serves as a liaison between the music teachers and central administration.

Musical aesthetics--The study of the relationship of music to the human senses and intellect (Brophy, 1992).

Visiting artist--A professional performing artist, seldom certified to teach in public schools, who shares his or her artistic knowledge in the school setting.

The Purpose

The purpose of this inquiry was to determine the importance of a music specialist in presenting a comprehensive, accountable music curriculum. Leonard's survey for the National Arts Education Research Center (1991) discovered a trend toward music specialists in elementary schools across the country. His 1989 results were compared to those of a similar 1962 National Education Association survey on the status of arts education. Leonard found that the percent of elementary schools offering general music remained constant at 98%. However, in 1989, 84% of the elementary schools had a written music curriculum as compared to 51% in the earlier study. On a negative note, weekly instructional minutes of music suffered a significant decrease, from 75 minutes to

53 minutes. The change between 1962 and 1989 in the type of teachers leading general music instruction was more notable. In 1962, classroom teachers taught 83% of music classes with or without the assistance of a specialist, and music specialists taught only 13%. By 1989, only 11% of the students received primary music instruction from classroom teachers and music specialists were responsible for 88% (Leonard, 1991, p. 8). Although Leonard's study (1992) exhibited a move toward music specialist instruction in the elementary schools across the nation, some schools continue to place responsibility for music in the hands of the classroom teacher. Because of these circumstances, this study examines and compares the results of instruction by a regular classroom teacher and music specialist in two similar settings. The relative effectiveness of each may provide a basis for revision in local education policies concerning who is a better choice to teach music in the elementary schools.

Chapter II. -- Literature Review

Introduction

The roles of music specialists and classroom teachers in music education evolved with the changing emphasis of music philosophies--entertainment and recreation, utilitarian goals, or aesthetic development (Ball, 1992). Therefore, to provide historical insight, literature on the development of music curriculum was included in this review. Other related literature addressed the conflicting philosophies of music educators, musical and non-musical justification for music instruction, difficulties in implementation, and teacher qualifications. Further, the author reviewed studies and writings on the role and value of classroom teachers and music specialists, separately and in combination.

History

In the early 1770's, clergymen expressed a desire to improve the quality of congregational singing in their churches. Thus, singing schools emerged in which instructors taught music through the study of choral works (Schwartz, 1986). By 1830, groups of singing schools united for conventions to study music and sing choral works. As the singing-school movement stimulated growing public support and interest, normal institutes provided a more concentrated pedagogical training (Schwartz).

With the rising public interest in musical training, Lowell Mason established the Boston Academy of Music in 1833 (Schwartz, 1986). The purpose of this institution was to teach music to all, train music instructors, and promote music as a part of the public school curriculum. In 1838, by virtue of Mason's eloquence and determination, the Boston public schools inaugurated music in their course of study with Mason acting as

music specialist (Greckel, 1973). His first demonstration concert on August 14, 1838 attested to his expertise, convincing the School Committee that music should be a continuing component of its regular curriculum (Brophy, 1992). In response to Mason's efforts, between 1840 and 1874, cities and towns in 26 states had adopted music instruction as part of their required general studies (Brophy, 1992). Specialized teachers obtained training during this period at the Boston Academy or through the singing schools (Schwartz).

However, following the Civil War, classroom teachers assumed much of the responsibility for music instruction because of a shortage of trained music specialists (Schwartz, 1986). The concern of the United States Bureau of Education led John Eaton, commissioner, to conduct a 1886 survey to assess the trend. Of 343 responses, only 19 districts had music specialists teaching all of their music courses while 96 districts divided the task between the classroom teacher and specialist (Brophy, 1992). Music also suffered as it was forced to compete with other emerging subjects for space in the curriculum and address conflicting views of methods and materials (Schwartz).

To counteract this perceived decline in instructional quality, N. Cole Steward in 1869 devised a plan to better prepare classroom teachers as music instructors. He proposed that a music supervisor would provide in-service training for classroom teachers and then guide their continuing music instruction (Schwartz, 1986). Hosea Holt, who in 1884 opened the first school exclusively for the training of music supervisors, furthered Steward's efforts. Other pioneers--such as Benjamin Jepson, Frances E. Howard, Charles Aiken, George Loomis, Thaddeus P. Giddings, and Edward B. Birge--became directors of

newly emerging music education degree programs in colleges and universities (Schwartz).

Edward B. Birge authored the first comprehensive account of the American music education movement. His History of Public School Music in the United States was published in 1928 and revised in 1937 (Birge, 1937). When Birge became the Director of Music in Indianapolis in 1901, music activities were declining there. He was determined to give every child the necessary skills to perform and understand music, and he enlisted the community members as active participants in the process (Schwartz, 1986). Birge organized a teachers chorus and selected talented classroom teachers to teach music in all grades (Birge, 1937). By 1905, he had established the People's Chorus and Concert Association, which provided a continuous educational program from first grade through adulthood (Birge). Through his community efforts, support grew for public school programs. Consequently, every child had daily instruction in music; including instrumental listening activities, which were under the supervision of trained music specialists (Schwartz).

While these many programs devised and nurtured by Birge provided a balanced program in Indianapolis, some attempts at music education fell short of the ultimate goal. For instance, marching bands emerged throughout the country. From the onset, band was an extracurricular, after-hours activity that was not regarded as part of the school curriculum. By its very nature, the public viewed band as a nonessential; a form of utilitarian entertainment (Ball, 1992). Because this aspect of music was highly visible, it overshadowed those with broader, deeper goals, such as concert band and orchestra.

Similarly, choral groups evolved. Despite the available model of the fine choral societies of Mason's era, most of the first school choral groups were glee clubs (Ball, 1992). These extracurricular organizations existed for the entertainment of the public and for the enjoyment of the members. To counteract this trend, F. Melius Christiansen and John Finley Williamson led a movement for the development of a public school a capella choirs in the period between World War I and World War II (Ball). Their efforts resulted in a broader repertoire and higher performance standards for choral groups. According to Ball, the current popularity of show choirs has again placed the importance on showmanship and entertainment, often at the expense of more educational music programs.

Yet, with the work of Christiansen and Williamson improving the integrity of some performing groups, the main aim of musical performances was usefulness rather than beauty or style. The utilitarian philosophy of music education prevailed until the curriculum reform movement of the 1950's and 1960's. Until that time, educators justified music education on the belief that participation would assist the individual in development of social, cultural, and moral values rather than the value of aesthetic experience (Hughes, 1986). The reform movement shifted the emphasis from a general education approach to a subject matter approach. Thus, music education became more aesthetic goal oriented and less utilitarian (Hughes, 1986).

In 1959, the American Association of School Administrators passed a resolution in support of the arts that said in part

We believe in a well-balanced school curriculum in which music, drama, painting, poetry, sculpture, architecture, and the like are included side by side with other

important subjects such as mathematics, history, and science. It is important that pupils, as a part of general education, criticize with discrimination those products of the mind, the voice, the hand, and the body which give dignity to the person and exalt the spirit of man (Hoffer and Hoffer, 1982, p. 6).

While this resolution pleased music educators, its interpretation brought disagreement. According to Caylor (1972), creativity and affective values of music should be foremost in instruction. Music was to be an opportunity to escape the material aspects of the scientific age, therapeutic in nature. To others, the resolution advocated music being taught as an academic discipline equal to science or mathematics. Proponents of this view placed priority on the structure of learning and development of musical skills, allowing that appreciation would follow the knowledge (Caylor). Caylor (1972) confirmed that these diverse viewpoints clashed in publications, recommendations, and research through the late 1950's and early 1960's.

Although a wide range of philosophies continued to exist, members of the Music Educators National Conference united in 1967 to compose the Tanglewood Declaration (Hoffer and Hoffer, 1982).

We believe that education must have as major goals the art of living, the building of personal identity, and the nurturing of creativity. Since the study of music can contribute much to these ends, we now call for music to be placed in the core of the school curriculum. The arts afford a continuity with aesthetic tradition in man's history. Music and other fine arts, largely nonverbal in nature, reach close to the social, psychological, and physiological roots of man in his search for identity and self-realization (Hoffer and Hoffer, 1982, p. 7).

Regardless of this unified support statement, music education varied in focus and extent throughout the country. In 1965 Schwadron observed that while most public schools required general music as part of the K-8 curriculum and some offered it as an elective in ninth grade, few offered general music in senior high. By 1986, elementary schools usually required arts instruction, according to Hughes (1986), but this instruction was limited to one or two single areas of study such as visual art or music. Hughes (1986) further discovered that most secondary schools offered single area courses, but these were seldom required. Combination subject approaches called related arts or applied arts were also common. Even as late as 1988, research by Gamble (1988) revealed 17 states that had no music requirement at the elementary level. However, according to a 1988 National Education Association report Toward Civilization: A Report on Arts Education, 29 states had graduation requirements which included the arts.

Philosophy

Hoffer and Hoffer (1982) wrote that the primary role of education was to prepare individuals to function successfully in society. The second role, according to the Hoffers(1982), was to transmit the culture of society to future generations by interpreting mankind's cultural achievement. By 1992, Ball advocated a broader perspective on the role of education. While he shared their ideals, Ball (1992) stressed that students should learn disciplines that embellish life, rather than simply provide a living.

While other educators concurred with the inclusion of arts in the curriculum, disparate juxtaposed philosophies of music education have generated broad variations in music programs in different states, districts, and schools (Caylor, 1972). Pont (1974) reiterated the classical Greek and Roman belief that music education had two broad aims:

(1) production of rational, good, and beautiful human beings and (2) production of rational, good, and beautiful environments. However, Olson (1986) remarked that practical justifications for music instruction – entertainment, service, economic benefits, and public relations – have overshadowed outcomes that are more valuable. He observed that arts educators often have set aside their principles for instruction to survive political whims.

Caylor (1972) delineated five major contrasting philosophies of music curriculum. The first ideal embraced music as a means of recreation, relaxation, leisure activity, release of tension, and growth of creativity and individuality. Proponents of this view often have argued that instruction by the classroom teacher is adequate. The second philosophy focused on the transmission of the nation's culture and heritage by teaching the history of music from the early years to the electronic age. The elitist approach reserved music education for the talented few. Group singing satisfied the needs of the masses while the bulk of instruction was devoted to the gifted. The fourth method required that music specialists concentrate instruction on musical literacy, thus developing ability, knowledge, and skill in every child. Those desiring to insure future musical innovations supported training with the current technology (Caylor 1972).

Ball (1986) provided a strategy for a multi-faceted music curriculum. For students desiring a music career, teachers tailored instruction to their talent and interest. The program demonstrated career possibilities for those who possessed sufficient talent but were uninformed. Teachers developed skills in students yearning to make music for enjoyment, while those with no intention to perform gained knowledge for enjoying the music of others (Ball, 1986).

Rationale for Music as a Subject

Siddell (1974) acknowledged that educators must be able to state with authority that the music curriculum is relevant to student needs. Hoffer and Hoffer (1982) added that unless teachers understand a substantial and satisfactory case for music, attempts at music instruction would be of limited value, if they were undertaken at all. Similarly, authors presented musical and non-musical pretenses for music instruction.

Musical skills. Ball eloquently related,

Above all, every student, whatever his or her aspiration deserves the opportunity to experience music's greater power—the opening of a door to a world of aural symbolism that mirrors the deepest and most ineffably profound meaning of life and the world (Ball, 1986, p. 5).

Hoffer and Hoffer (1982) concurred that solid understanding and accomplishment are necessary for lasting satisfaction and enjoyment of music. They further maintained that this understanding would not likely occur without classroom interaction between devoted teachers and motivated students.

Schwadron (1965) postulated that quality music instruction developed listening and analytical skills as well as artistic discrimination necessary for making educated value judgements. Additionally, students grew to understand the creative process in composing, the merits of popular and serious music, and innovative methods of music production (Schwadron, 1965). Furthermore, the National Standards for Music Education contended that singing, playing instruments, moving to music, and creating music lead to the development of musical knowledge and skills which cannot be acquired by other means (Music Educators National Conference, 1997). The organization further

maintained that students acquire skill in reading and manipulating notation, thus allowing future independent exploration (MENC, 1997).

Non-musical skills. Throughout history, educators have justified music education for assisting the students in developing cultural, social, and moral values (Hughes, 1986). Kabalevsky (1974) and Ball (1992) contended that music education must help students understand the surrounding world, shape their views on life, and foster their moral ideals. The Music Educators National Conference (1997), while known for fostering musical outcomes, conceded that music is a basic expression of human culture.

Additionally, the emphasis on United States competition in the world economy has pointed to the importance of problem-solving ability, higher-order thinking skills, risk-taking, teamwork, and creativity. These traits have been enhanced in students involved in arts programs (Hanna, 1992). Business leaders, politicians, and the news media have remonstrated that public schools do not produce self-disciplined, hard-working citizens (Miller & Coen, 1994). Miller and Coen reported that persistence, a healthy work ethic, and self-discipline would be most effectively attained through music study.

Hanna (1992) related that the arts improve the graduation rate by retaining children in school, promote student achievement in challenging subjects, and provide a disciplined environment. The excitement of the arts and successful performance often inspire students to persevere in other subjects (Hanna). Sautter (1994) cited a 1990 Florida State University study that linked arts participation with improved attendance and a significant reduction in the drop-out rate.

Additionally, other research has connected music study with achievement in other

subject areas. New York City teachers have significantly improved math understanding for students scoring in the lower 15% on standardized tests by correlating musical note values with mathematical fractions (Dean & Gross, 1992). Further, Hanna (1992) reported that with the addition of arts education being the sole curriculum adaptation, test scores in Sampson County, North Carolina rose significantly for two consecutive years. The National Center for Educational Statistics confirmed that the grade point average of students who take more than three credits in the arts are generally higher than the rest of the student body (Hanna, 1992). Similarly, the 1987, 1988, and 1989 high school student profiles compiled by the College Board revealed that students who had taken arts courses tended to score higher on the Scholastic Aptitude Test. The profiles further revealed that scores rose proportionately to the number of arts classes taken.

Difficulties in Implementation

Although researchers and educators have defined specific and general benefits of music education, administrators have traditionally not been generous in their support. In a system which has judged educational programs by economic standards and utility, many have perceived music as recreational enrichment (Ball, 1992). Meanwhile, state officials who control curriculum requirements have pressed for general requirements over specialized subjects (Caylor, 1972). Moreover, some parents expressed the view that arts education diverted attention and resources from subjects which might prepare their child for high-paying jobs (Hanna, 1992).

Given the wealth of support from influential groups, Lehman (1992), a past-president of the Music Educators National Conference, questioned why music has remained so often outside the core of curriculum. In curricular discussions, the

educational system of Japan was consistently cited as the higher role model to defend concentration on math, science, and reading (Lehman, 1992). However, Lehman (1992) continued, officials failed to realize that every Japanese elementary and middle school student participated in music instruction at least two hours each week.

Hoffer and Hoffer (1982) held that the enjoyable nature of music education became a drawback to implementation. Schwadron (1965) likewise stated, “Music in the schools has come to be recognized by the general educator as synonymous with entertainment, and is evaluated and consequently financed on the functional basis of entertainment, ‘background music’ for school affairs, public relations, and school prestige” (p. 63).

Schwadron (1965) theorized that administrators and policy-makers often did not support music because their personal school music experience was not meaningful. They may have participated in a program that focused on secondary performance areas, thus neglecting elementary students and less gifted secondary students (Schwadron, 1965). Similarly, Ball (1992) comprehended the difficulty in convincing a person with little music background that school music participation was as important as learning to read or perform mathematical operations.

Additionally, Hughes (1986) contended that public policy statements made on the federal, state, or local level often address the arts in general. He contended that this approach diminished the separate identities of each of the arts. Therefore the need for adequate funding, staff, and instructional time for the individual areas has not been realized (Hughes, 1986). However, arts support groups have published recommendations on these topics.

Scheduling Recommendations

While each state and school district adopts scheduling policies, the Music Educators National Conference (MENC) has established suggested guidelines. In 1972, the MENC National Commission on Instruction reported that music instruction should consist of at least three 30-minute periods each week throughout the school year (Music Educators National Conference, 1972). This requirement was further delineated in the 1994 Opportunity-to-Learn Standards for Music Instruction (Music Educators National Conference, 1994). The organization requested that elementary students receive music instruction for 90 minutes each week, excluding choral or instrumental electives. Furthermore, the authors suggested class periods of 20 to 30 minutes in length for children in first or second grade and 25 to 45 minutes for grades three through six (MENC, 1994).

Teacher Requirements

While time recommendations were addressed, the major debate found in the literature focused on teacher requirements. Schwadron (1965) related that teacher preparation is of essential importance, as all activities—singing, playing, creating, and listening—should work toward musical understanding and aesthetic significance. Similarly, Lehman (1992) contended that the arts cannot be learned through random or casual experiences any more than mathematics or biology can. He went on to express that regular, systematic programs of sequential study must lead to specified objectives (Lehman, 1992).

Ball (1986) believed that in order to provide a role model for future professional musicians, teachers must themselves be performing musicians. He further explained that

they must understand the structure of music and have a comprehensive knowledge of the literature. Additionally, effective teachers should have intuition to know when to encourage and when to chasten—when to instruct and when to let the music speak (Ball, 1986). Schwadron (1965) further stated that musical preparation of the elementary music teacher must be extensive to cope with theoretical and pedagogical difficulties, the sensitive problems of musical structure and composition, the scale system, abnormal patterns in Western music, and experimental techniques in contemporary music.

Furthermore, Schwadron (1965) expressed his concern that the most qualified, articulate music teachers often instruct in the secondary schools instead of at the foundation level in the elementary schools. In 1973, Greckel explained the seriousness of this trend. He related that most deficiencies in musical ability result from lack of experiences and training in early childhood. Under current circumstances, Greckel continued, there exists a “vicious cycle” with the children who are lacking in meaningful music instruction becoming the classroom teachers of tomorrow (Greckel, 1973).

In addition to specialized training within the subject area, authors cited other important traits for a successful music instructor. Schwadron (1965) stated that a music teacher must be a highly creative educator for whom music is a natural means of aesthetic expression. Kabalevsky (1974) cautioned teacher education candidates of the high demands on the instructor who must not know only the subject, but also love music as a live art that fills him/her with excitement. “We cannot inspire our children to love something which we do not love ourselves, or arouse their enthusiasm for something which leaves us unmoved” (Kabalevsky, 1974, p. 127).

The Classroom Teacher as the Primary Music Instructor

The number of students receiving public school music instruction from a certified music instructor has gradually increased in the last fifty years. However, in many systems, classroom teachers held sole responsibility for the music curriculum (Leonard, 1991). Authors expressed opinions on the benefits and drawbacks of the latter situation.

Benefits. According to Mills (1991), a trainer of classroom teachers and specialists in Great Britain, a properly organized and supported system of generalist music teaching was ideal. Mills contended that classroom teachers possess teaching expertise and that their teaching skills readily can be applied to music. Additionally, ability to play the piano or a good singing voice is not necessary, according to Mills (1991). As a teacher needs not be a novelist to develop written language skills, Mills remarked, comparably instructors can successfully engage children in music without being musicians themselves (Mills, 1991).

Hughes (1986) cited the classroom teacher's knowledge of the total curriculum and familiarity with the students as a benefit. Hoffer and Hoffer (1982), Mills (1991), and Hughes (1986) conveyed that the generalist could relate music to the other subject areas as well as the children's individual needs. Hughes (1986) further remarked that classroom teachers use music for recreation, a change of pace, emotional release, socialization, and for a method of fostering self-esteem in their students. He cautioned, however, that these uses do not address music as an academic subject (Hughes, 1986).

Greckel and Schwadron supported generalist music instruction less enthusiastically. Greckel (1973) stated that while this situation is not the most desirable, survival techniques do exist — recordings to accompany texts, recording the voices of

others, films and television, and pupils leading songs. He also recommended team teaching, a system in which one teacher would instruct music in both classrooms in exchange for the other's teaching another subject to the two (Greckel, 1973). Schwadron (1965) also noted that publishers have written music texts expressly for classroom teachers.

Drawbacks. The most cited argument against classroom teachers as music instructors is the lack of commitment and structure. While some were willing to devote class time to music, the program often was not organized (Hoffer and Hoffer, 1982). Hoffer and Hoffer(1982) explained that, consequently, the singing of two songs relating to the social studies lesson is the extent of some music programs. Patchen (1996) emphasized that the organization of a general music program required a great deal of effort, which many classroom teachers are not willing to commit. He expressed that classroom teachers require and benefit from the expertise and resources that only a specialist can provide (Patchen, 1996).

Mills, who supported generalist music instruction, related difficulties with the arrangement. A lack of confidence in their ability, she explained, prevented classroom teachers from attempting music instruction. This deficit in confidence was caused by the teacher's perceived inability to emulate the teaching style of their own primary music instructor (Mills, 1991). Hoermann (1994) concurred that no magic formula exists to enable a classroom teacher to pitch intervals accurately, pitch match, or differentiate rhythm patterns. Hoermann continues, inability may be overcome with patient practice, but the teacher's conviction, personality, and enthusiasm are the essential factors.

Birge, a pioneer in twentieth century music teacher training, addressed the

training of classroom teachers. If they were to teach the arts to children, Birge believed classroom teachers should be required to have basic music skills as a part of their education and should be supervised closely by a music specialist (Schwartz, 1986). Even with these provisions in place, complaints surfaced. In 1965, Schwadron stated, “The casual acquaintance with music which so often characterizes the type of musical instruction available to potential classroom teachers is, on the whole, insignificant and insufficient for a vigorous, meaningful general music program, with or without the music consultant” (p. 64). Similarly, Greckel (1973) remarked that while a deficiency in history knowledge might be corrected by one or two courses, a person with difficulty singing might need extensive help. Caylor (1972) observed that, although classroom teachers are teaching music, they are not required to take any qualifying examinations in the subject. More seriously, Gamble in 1988 reported that only 26 states required arts study for elementary classroom certification.

Although authors argue that general teacher training is sufficient for music instruction, the Music Educators National Conference (1972) found that a significant number of classroom teachers do not teach music. Schwadron (1965) evaluated this type of program as a watering down of music literature, lacking artistic creativity, and missing the aesthetic experience. More strongly, Caylor (1972) referred to music as a sterile, illiterate subject when taught by classroom teachers.

The Music Specialist as the Primary Music Instructor

Traditionally, too, music has been the subject which is taught most frequently by someone other than the classroom teacher (Mills, 1991). However, Mills (1991) reported that special music teachers tend to operate differently from teachers with curriculum

responsibility in other subject areas. While other curriculum leaders are mainly coordinators, advising the general teachers, music specialists take over classes while the classroom teachers are busy elsewhere (Mills, 1991). The author found differing levels of support for music specialist instruction such as this in the reviewed literature.

Benefits. Ball (1986) stated that while the classroom teacher and professional artist may play a role in music education, the primary responsibility for teaching music rests with the music specialist. Hughes (1986) believed that the music specialist knows the subject matter and has specialized training to teach musical skills and concepts for which the classroom teacher is not prepared. In 1982, Hoffer and Hoffer surveyed graduation requirements of music education programs in several universities. They found that often 50 % of the courses required were in the area of music—music theory, music history and literature, applied study on an instrument or in voice, music methods, conducting, and ensemble. Therefore, they concluded that the subject matter and performance skills of music graduates were far superior to those of most elementary education majors who take one or two music courses (Hoffer and Hoffer, 1982). Hughes (1986) added,

If music education is to bring about any degree of musical independence so that students can later function in the adult world as discriminating consumers or participants, then music skills must be taught, and they are likely to be taught more effectively by a musician teacher (p. 54).

More strongly, Schwadron (1965) warned that if music educators fail to defend the need for certified music teachers, they dilute the integrity of the musical arts and invite criticism.

Greckel (1973) defended the need for resident specialists as regular members of elementary teaching staffs, in that they would inevitably improve the quality and effectiveness of music education. He cautioned further that an itinerant wandering from room to room is not effective. The resident specialist should be settled in a music studio with live acoustics, versatile furnishings, and a variety of instruments (Greckel, 1973).

Greckel (1973) advocated also for the music specialist to teach all children, not only those served by a pullout band, orchestra, or chorus. Equally important, Lehman (1992) clarified that artists-in-residence are not the same as music specialists. While they are valuable for enrichment, their program traditionally is passive and receptive (Lehman, 1992).

Hoffer and Hoffer (1982) stated that school districts many times hire specialists to provide release time for classroom teachers. Special teachers fill the role while teaching a legitimate subject, one that generalists often avoid instructing. While this procedure has increased the number of music specialists in the schools, the Hoffer's expressed that administrators have hired these teachers for an inappropriate reason.

Drawbacks. In 1974, Siddell stated that if educators expected a specialist in every elementary school, they would be disappointed. Current statistics have confirmed the accuracy of this prediction (Ross, 1992). The reviewed authors cited several theories on the growth stagnation in the placement of music specialists.

For his theory, Greckel (1973) cited insufficient funding as the major obstacle to hiring music specialists. He believed that the failure of policy makers to recognize the need and advantage of specialists led to this misappropriation (Greckel, 1973). Asmus and Haack (1996) concurred that certified music teachers often are marked as specialists

and are viewed as “extras”, which are quick to be cut in back-to-basics swings. They attributed this misconception to the isolated manner in which some music instructors construct and teach their program (Asmus and Haack, 1996).

In addition, Mills (1991) observed that classes taught by music specialists had more discipline problems which interfered with instruction. She held that the specialist did not know the children well enough to deal with their individual personalities (Mills, 1991). While Hoffer and Hoffer (1982) agreed that specialists might have difficulty becoming acquainted with each child, they noted two additional drawbacks. First, specialists maintain strict schedules that prevent adaptation for special units of instruction. Second, these rigid schedules allow little time for teacher interaction, which would promote integration of music with social studies or language arts projects (Hoffer and Hoffer, 1982).

Moreover, Patchen (1996b) observed that the lack of adequate numbers of elementary and middle school music specialists, especially in the southeastern United States, has these teachers extended beyond reasonable limits. Many areas have specialists only at the secondary level for performance groups (Patchen, 1996b). Similarly, Greckel (1973) perceived that specialists too often are a visiting teacher who instructs each class for one short period each week—a situation that he deems inadequate. The Music Educators National Conference (1972) suggested that it is unrealistic for specialist to be responsible for more than 300 students per week.

Greckel (1973) further advocated that classroom teachers should assist the music specialist during classes, thereby gaining skills to integrate music into their classroom. Unless the classroom teacher is willing to provide music instruction between specialist

visits, there may be little continuity (Hughes, 1986).

However, Ball (1986) cautioned that the presence of a music specialist does not guarantee a good program. The teacher must be well prepared and use proper techniques, and the program must be adequately funded. Moreover, Ball (1986) contended that poor teacher training programs account for one reason music specialists are challenged as best qualified for teaching music. He remarked that performance ability is too often over-emphasized at the expense of methods courses (Ball, 1986).

The Cooperative Approach

In an attempt to remedy shortcomings of the individual delivery systems, educators have developed a combination model. In addition, heightened interest in arts integration during the last quarter century has lead researchers to explore the cooperative approach to music education. Ross (1986) proclaimed that this team effort is necessary if arts education is to be successful. This team involves the music specialist, classroom teacher, and, at times, a performing artist (Ross, 1986).

Patchen (1996b) defined the roles of each team member. The music specialist serves as the expert in aesthetics, music history, and production. This member assumes the leadership role and is an indispensable resource and facilitator to the classroom teacher (Patchen, 1996b). Asmus and Haack (1996) added that the specialist is responsible for designing and implementing music production activities, guiding listening activities, and assisting in composition. He or she serves as a resource person for the classroom teacher in aesthetics, music history, and music criticism (Asmus and Haack, 1996). Siddell (1974) explained that the specialist should be the catalyst for music education by planning, advising, and assisting the classroom teacher.

Hoffer and Hoffer (1982) summarized the supportive role of the classroom teacher as helping students achieve objectives, implement plans, and follow up areas of study. Patchen (1996b) explained that the generalist teacher provides insight into other subject area requirements and helps to integrate music in a relevant manner. Asmus and Haack (1996) added that this educator should direct music listening, group discussions, written responses to music, and study in general history. He or she should support the activities of the music specialist.

Hughes (1986) asserted that a quality music education program should capitalize on the strengths of the specialist, generalist, and visiting artists. The specialist and classroom teacher access community and regional artists who provide enrichment activities (Olson, 1986). These artists generate creativity and inspire higher performance standards (Ross, 1986). Equally important, the arts educator employs a developmental sequence of arts activities to interpret and redefine the presented works of art (Ross). Olson (1986) indicated that the community and the practicing artists should offer suggestions for the design of the long-term curriculum.

Patchen (1996a) noted that implementation of cooperative approaches, such as discipline-based music education, occurs most often at the classroom or building level. Siddell (1974) held that this instructional technique does not dilute music education standards, but rather involves a wider range of expertise. Siddell further stated, "If music education is to make and continue to make an impact, it cannot remain the responsibility of a few" (p. 200). However, as with the other approaches, positive and negative comments were reviewed.

Benefits. Asmus and Haack (1996) reported several desirable outcomes of the

discipline-based system. In general, music provides themes of study, holds the student's interest, and promotes attention and motivation. With the specialist involved in formulating total school goals, music education is recognized as an integral and indispensable part of the total education process (Asmus and Haack, 1996). Classroom teachers find that analyzing music provides a means for attaining higher order critical thinking skills (Asmus and Haack) and creates a community of inquiry (Patchen, 1996b). Moreover, teachers devote more instructional time to music, and broader contextual instruction leads to a higher level of understanding (Asmus and Haack).

Olson (1986) reported that the three-way partnership between practicing artists, arts specialists, and generalists provides the most complete assemblage of expertise of all instructional methods. This team approach contributes instruction for a variety of needs as well as long-term consistency (Olson, 1986). Hughes (1986) explained that students gain insight that music can be both enjoyed and taught by persons at various levels of musical maturity.

Drawback. Patchen (1996b) maintained that the specialist, generalist, principal, and parents must all receive extensive training for the cooperative approach to be successful. However, Ross (1986) expressed concern that very few education students have an opportunity to observe collaborative efforts as few models exist. Ross (1986) also contended that educators are limited by the lack of materials and units that are organized for cooperative teaching.

Additionally, Ross (1986) stated that often the cooperative approach fails because each of the contributors is not comfortable with the others. Ross (1986) added that this instructional model rarely is fully developed because the roles are not clearly defined:

artists try to be teachers, music teachers want to demonstrate their performance abilities, and classroom teachers fail to relate the music to the general curriculum.

Even when roles are clearly delineated, communication between participants may be insufficient, observed Hoffer and Hoffer (1982). Administrators may assign one specialist to 20 or more classroom teachers in multiple schools. With this situation, the specialist would have great difficulty meeting with each generalist. The Hoffers (1982) suggested that the classroom teachers would have to be flexible with their release time, staying at times for a portion of the music class to obtain information for follow-up activities.

Just as music classes require follow-up activities for continuity, Ross (1986) cautioned that preparation is necessary for the artist's visit. He observed that performances without proper background information and subsequent action were passive and lacked meaning (Ross, 1986). Lehman (1992) criticized the National Endowment for the Arts for spending the majority of their funds on visiting artists. While performances are beneficial in combination with a comprehensive, sequential arts program, too often administrators see this program as an alternative to a curriculum-based arts program (Lehman, 1992).

Summary

To provide background information on the evolution of various teaching styles, the author presented an historical review of music education. Other related literature addressed the justification for music instruction and teacher requirements. Furthermore, the literature defining and criticizing the most common instructional models was reviewed. While each method had merits, authors generally found that those approaches

involving a music specialist provided a more comprehensive, accountable music curriculum. While more difficult to implement, the cooperative approach benefited from the broad knowledge base provided by the diverse teacher backgrounds.

Chapter III—Methods and Procedures

The literature reviewed in the previous chapter presented evidence that involvement of a specialist in teaching music contributes to a more effective comprehensive curriculum. Likewise, this study examines the effect of music specialist instruction as compared to classroom teacher instruction in two similar schools. The researcher obtained written permission from school administrators before proceeding with the study.

The Setting

The setting for this research was Harrison and Marion counties, adjacent counties in north central West Virginia. Harrison County has an area of 417.85 square miles and a 1990 population of 69,371. Marion County covers 313.55 square miles and has a population of 57,249 (Holmes, 1997). Subjects for this study attended Watson Elementary School in Fairmont, Marion County and Lumberport Elementary School in Lumberport, Harrison County.

Watson Elementary School serves kindergarten through fourth grade students from a portion of downtown Fairmont, the Watson suburbs, and surrounding rural areas. Of the 352 students enrolled, 192 are male and 160 are female. Of these students, 148 children, or 42%, are classified within the poverty level. Thirty-five students have been identified with disabilities (Zirkle, 1998).

Of the 348 students registered in Lumberport Elementary School, 169 are male and 179 are female. The school serves a small town and surrounding rural area and houses kindergarten through fifth grade students. The number of students within the poverty level is 233, or 67% of the student population. At least 19 students have been

identified as children with disabilities (Southern, 1998).

Sample

The sample for this study consisted of a second grade and a fourth grade class from each school. Of the participants at Watson, 18 were male and 16 were female. The group from Lumberport consisted of 15 males and 14 females. As the classes within each school were previously formed, the resulting study was ex post facto.

For this inquiry, the independent variable was the method of music instruction—music specialist or classroom teacher. Local boards of education policies had predetermined this aspect of the study. While Marion County employs music specialists in all elementary schools, Harrison County has specialists only in selected schools. Lumberport Elementary did not have a specialist at the time of this study.

Collection of Data

For this study, student scores on selected instructional goals and objectives were the dependent variable. To evaluate these objectives, the researcher used tests written to accompany the Silver Burdette Music series, which was in use in both counties. Identical instruments were used for the pretest and post-test (See Appendix). The researcher selected tests to measure achievement levels on the six selected West Virginia Instructional Goals and Objectives. The chosen objectives for second grade were as follows:

- 2.11 read quarter, half, and whole notes and rests and manipulate them on a staff.
- 2.12 using solfeggio syllables, manipulate notation for the pentatonic scale.
- 2.19 identify instrumental families by seeing a representative instrument from each family (West Virginia Department of Education, 1997).

Fourth grade objectives evaluated in this study were

4.15 read whole, dotted half, half, dotted quarter, quarter, eighth, and sixteenth notes and rests.

4.16 read notation for melodies based upon major scales.

4.22 visually identify instruments of the string family, the woodwind family, the percussion family, and the brass family(West Virginia Department of Education, 1997).

The researcher chose the preceding objectives because concrete evaluations were available as opposed to the objective performance criteria that are essential for evaluation of other objectives.

Hypotheses

The author formulated and tested the following hypotheses using the sample data.

H_0 : It is hypothesized that there will be no significant difference in post-test scores of the two schools with respect to the selected objectives.

H_1 : It is hypothesized that the classes taught by a music specialist will score significantly higher on the post-test than those taught by the classroom teacher with respect to the selected objectives.

Procedure

During the first week of March 1998, the participating teachers administered the pretest. The two classroom teachers presided over the pretest at Lumberport Elementary and the music specialist supervised the Watson testing. This test was used to determine ability levels in relation to selected Instructional Goals and Objectives before instruction

commenced. Teachers did not assist or instruct students in any way during the pretest.

In the twelve weeks following the pretest, the classroom teachers at Lumberport and specialist at Watson continued with their normal method of music instruction. All were aware of the objectives that were to be post-tested at the termination of that period. In addition, both schools were equipped with Silver-Burdette textbooks, teacher resources, and recordings. This state-adopted series correlates with the West Virginia Instructional Goals and Objectives (IGO's).

During the third week in May 1998, students in both of the participating schools completed post-tests. These tests were identical to the pretests given twelve weeks prior. As before, the teachers provided no assistance during the testing.

Presentation of Data

Data for each grade level were analyzed and compared through calculation of the mean, and the standard deviation for each set of data was determined. The researcher conducted a t-test for independent means using the pretest scores for each grade level group to determine congruency of the groups before the commencement of instruction. Then, the researcher calculated the t-test for independent means using post-test scores to determine whether a significant difference existed between the two schools following instruction. Also, the author compared post-test means with pretest means by conducting a t-test for nonindependent means to observe the degree of improvement.

Summary

While the ex post facto design of this study eliminated the possibility of random selection, the researcher attempted to maintain validity by analyzing pretest scores for congruent grouping. Further, the published tests with subjective answers prevented an

objective bias. Teachers in both schools had access to the same materials, and the instructional goals and objectives were in use statewide. In addition, the school populations and sample classes were similar. While the researcher shall not present the results of this ex post facto study as causal, these precautions make the findings more reliable.

Chapter IV – Results and Findings

The sample for this study consisted of 34 students from Watson Elementary School in Fairmont, West Virginia and 29 students from Lumberport Elementary School located in Lumberport, West Virginia. The students were members of a self-contained second or fourth grade class at their respective schools. The students from Watson Elementary interacted with a music specialist 40 minutes each week. Time allowed for music instruction at Lumberport Elementary was at the discretion of the classroom teacher and therefore varied weekly.

For this study, the test scores of the 17 second grade students from Watson were compared with the 11 second grade students from Lumberport. Nine boys and eight girls comprised the Watson second grade class while four boys and seven girls made up the second grade group from Lumberport. In addition, the scores of 17 Watson fourth grade children were compared with 18 Lumberport fourth grade children. In the fourth grade groups, Watson had nine boys and eight girls while Lumberport had eleven boys and seven girls.

The researcher performed t-tests on pretest means to determine if the classes were congruent before the ex post facto study commenced. Then, following the 12 weeks of specialist music instruction at Watson Elementary and classroom teacher music instruction at Lumberport Elementary, the teachers administered the post-test. Using a t-test to scrutinize the presence of a significant difference, the author analyzed these scores.

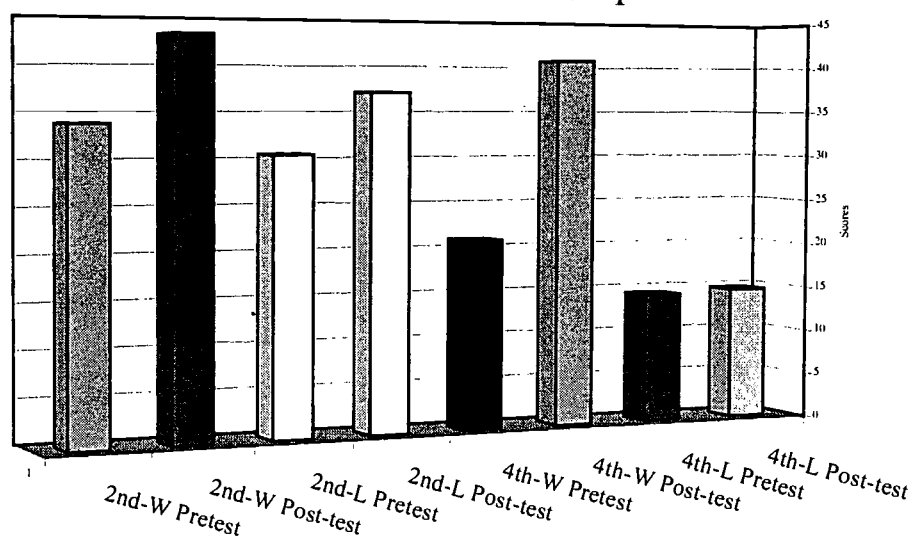
Mean and Standard Deviation

The following table exhibits the mean, range, and standard deviation for each set

of scores.

Class	PRETEST			POST-TEST		
	Range	Mean	Standard Deviation	Range	Mean	Standard Deviation
2 nd —Watson	25-39	33.82	3.70	37-45	43.24	2.22
2 nd – Lumberport	10-39	30.45	9.79	30-43	37.09	3.62
4 th – Watson	9-37	20.94	7.12	29-45	40.65	4.54
4 th – Lumberport	8-23	14.33	4.17	9-22	14.67	3.65

Mean Comparison Chart



t-Tests

Using the group means tabulated above, the author performed a t-test for independent means to compare pretest scores. For the second grade pretests, the researcher found no significant difference, $t(26)=1.2943$, $\alpha=.05$, thus similar test groups were confirmed. However, the t-test on post-test means demonstrated that the Watson second grade class scored significantly higher than those second grade students at Lumberport, $t(26)=5.593$, $\alpha=.005$. Therefore, H_0 is rejected and H_1 is accepted.

To determine if post-test scores were a significant improvement over pretest scores, the author conducted a t-test for nonindependent means. The Watson second grade

students exhibited significant improvement, $t(16)=8.4921$, $\alpha=.005$. The improvement in scores for the second grade at Lumberport were also significant, but at a larger critical t , $t(10)=2.8356$, $\alpha=.01$.

In the comparison of the fourth grade students at the two schools, the researcher found that Watson students scored significantly higher on the pretest, $t(33)=3.375$, $\alpha=.005$. Similarly, the test found a wider advantage for Watson students at the post-test level, $t(33)=18.7168$, $\alpha=.005$. Thus, for post-test scores at the fourth grade level, H_0 was rejected and H_1 was accepted.

The significant difference in fourth grade pretest scores denied the presence of equitable groups at the beginning of the study. However, the t-test for nonindependent means demonstrated the variance in achievement during this study. The t-score comparing pretest and post-test scores for the Watson fourth grade students was significant, $t(16)=13.4362$, $\alpha=.005$. However, the two-score comparison for Lumberport fourth grade children found no significant difference at the $\alpha=.05$ level, $t(17)=.4609$.

t-TEST FOR INDEPENDENT MEANS

COMPARISON SCORES	t VALUE CRITICAL t at $\alpha=.05$	df	CONCLUSION
Second Grade—Pretest Watson / Lumberport	$t=1.2943$ Critical $t=1.706$	26	No significant difference
Second Grade—Post-test Watson / Lumberport	$t=5.593$ Critical $t=1.706$	26	Reject H_0 at $\alpha=.005$
Fourth Grade—Pretest Watson / Lumberport	$t=3.375$ Critical $t=1.645$	33	Significant at $\alpha=.005$
Fourth Grade—Post-test Watson / Lumberport	$t=18.7168$ Critical $t=1.645$	33	Reject H_0 at $\alpha=.005$

t-TEST FOR NONINDEPENDENT MEANS

COMPARISON SCORES	<i>t</i> VALUE CRITICAL <i>t</i> at $\alpha=.05$	df	DIFFERENCE
Second Grade—Watson Post-test / Pretest	$t=8.4921$ Critical $t=1.746$	16	Significant at $\alpha=.005$
Second Grade—Lumberport Post-test / Pretest	$t=2.8356$ Critical $t=1.812$	10	Significant at $\alpha=.01$
Fourth Grade—Watson Post-test / Pretest	$t=13.4362$ Critical $t=1.746$	16	Significant at $\alpha=.005$
Fourth Grade—Lumberport Post-test / Pretest	$t=.4609$ Critical $t=1.740$	17	Not significant at $\alpha=.05$

Chapter V – Conclusions and Recommendations

Summary

Pretest results presented in the preceding chapter confirmed the similarity of the two second grade classes prior to instruction. Likewise, the analysis of second grade post-test scores supported the claim that classes taught by a music specialist would score higher than those taught by a classroom teacher. Although both groups made significant gains, the t-test results emphasized difference in degree.

However, at the fourth grade level, the pretest scores differed widely. The author hypothesizes that this disparity may be attributed to the Watson students' prior study with a music specialist in grades one through three. While these students had not studied the tested material previously, they had acquired preparatory knowledge that enabled them to more accurately answer the pretest questions.

Nevertheless, the fourth grade students who studied with a music specialist doubled their pretest scores on the post-test. The scores of those students taught by the classroom teacher were stagnant. More important, the mean score for those students taught by a specialist reflected 90% mastery of the objectives. Conversely, those students who were taught by the classroom teacher exhibited only 33% mastery.

Conclusions

The purpose of this study was to determine the importance of a music specialist in presenting a comprehensive, accountable music curriculum. While the limitations of an ex post facto study prohibit causal conclusions, the researcher has presented an emphatic case supporting music specialist instruction. Further, as evidenced by the data, the

variation in achievement became increasingly critical with grade level progression.

Although this study involved a small sample group from two elementary schools, these students are representative of West Virginia elementary students. Consequently, this study reveals an inequity in music instruction provided within counties and throughout this state. Just as the West Virginia Department of Education adopted the Music Instructional Goals and Objectives for all music programs, so too county officials must insure that students have the opportunity to achieve them.

The objectives evaluated in this study were mainly cognitive and less aesthetic than the majority of the music goals. Ease and subjectivity of testing were the contributing factors to their selection. Moreover, classroom teacher-training programs generally focus their music training on concrete areas such as these. Consequently, such a wide variance in achievement on these objectives would predict an even broader deficit in the more aesthetic and performance-oriented goals.

Recommendations

The author recommends that further comparison research of this type be conducted statewide, thus providing the benefit of a large population. The West Virginia State Department of Education has been refining a state music assessment that could easily be adapted for such a study. The results then could be analyzed to determine the need for music specialists and possibly to establish a state mandate.

Meanwhile, the researcher intends to present the results of this inquiry to the staff of Lumberport Elementary School and to the Harrison County Board of Education. After a presentation of comparative achievement levels, administrators may reconsider staffing needs. In addition, a copy of this study will be forwarded to the state Coordinator for the

Fine Arts at her request.

This study strongly suggests that music specialists are a necessary component in presenting a comprehensive, aesthetic music curriculum. These teachers train to instruct their discipline much as medical specialists learn to operate within their area of specialization. Consequently, in the interest of educational excellence, music specialists are the justifiable option.

BIBLIOGRAPHY

Asmus, E. P. & Haack, P. (1996). Defining new teaching roles. Music Educators Journal, 83 (2), 27-32.

Ball, C. H. (1986). Educating the specialist teacher of music. Design for Arts In Education, 87 (6), 5-8.

Ball, C. H. (1992). Image and reality in music education. Design for Arts In Education, 93 (4), 11-15.

Birge, E. B. (1937). History of public school music in the United States. Boston: Oliver Ditson Company.

Brophy, T. (1992). From science to aesthetics: Tracing the role of music in America's public schools. (ERIC Document Reproduction Service No. ED 368 611)

Caylor, F. (1972). On the treadmill of elementary music education. Music Educators Journal, 58 (7), 33-37.

Crowl, T. K. (1996). Fundamentals of educational research. Dubuque, IA: Brown and Benchmark Publishers.

Dean, J., & Gross, I. L. (1992). Teaching basic skills through art and music. Phi Delta Kappan, 73, 613-618.

Eisner, E. W. (1992). The misunderstood role of the arts in human development. Phi Delta Kappan, 73, 591-595.

Erb, J. L. (1996) . The training of the teacher. The American Music Teacher, 46, 20-23, 82.

- Gamble, S. (1988). The elementary classroom teacher: An ally for music education. Music Educators Journal, 75 (1), 25-28.
- Geoghegan, W. (1994). Re-placing the arts in education. Phi Delta Kappan, 75, 456-458.
- Gough, P. B. (1992). Art for our sake. Phi Delta Kappan, 73, 579.
- Greckel, W. C. (1973). The music problem and the specialist in elementary education. Elementary School Journal, 73 (5), 251-257.
- Hanna, J. L. (1992). Connections: Arts, academics, and productive citizens. Phi Delta Kappan, 73, 601-607.
- Hoermann, D. B. (1974). The role of the elementary classroom teacher in music education. In F. Callaway (Ed.), International Society for Music Education: Challenges in music education (pp. 128-134). Perth, Western Australia: General Printing.
- Hoffer, C. R., & Hoffer, M. L. (1982). Teaching music in the elementary classroom. New York: Harcourt Brace Jovanovich.
- Holmes, D. E. (1997). West Virginia blue book 1997. Charleston, WV: Chapman Printing.
- Hughes, W. O. (1986). Arts/music education: Specialist, generalist, visiting artist? Design for Arts In Education, 87 (6), 53-55.
- Kabalevsky, D. (1974). Music in general schools. In F. Callaway (Ed.), International Society for Music Education: Challenges in music education (pp.123-128). Perth, Western Australia: General Printing.
- Lehman, P. R. (1992). Winning and losing in the struggle to reform education.

Design for Arts In Education, 93 (5), 2-12.

Leonhard, C. (1991). Status of arts education in American public schools. Report on a survey. Summary and conclusions. Urbana, IL: National Arts Education Research Center. (ERIC Document Reproduction Service No. ED 338 551)

Miller, A., & Coen, D. (1994). The case for music in the schools. Phi Delta Kappan, 75, 459-461.

Mills, J. (1991). Music in the primary school. New York: Cambridge University Press.

Music Educators National Conference (1997). The national standards for music education and what they mean to music educators [On-line]. Available: <http://www.menc.org/books/prek12st.html>.

Music Educators National Conference National Commission on Instruction. (1972). The music specialist in the elementary school. Music Educators Journal, 59 (3), 60-62.

Music Educators National Conference. (1994). Opportunity - to learn standards for music instruction. Reston, VA: Author.

Olson, G. B. (1986). The learners' advocate. Design for Arts In Education, 87 (6), 43-46.

Patchen, J. (1996a). Discipline-based music education: A comprehensive approach. Music Educators Journal, 83 (2), 17-18.

Patchen, J. (1996b). Overview of discipline-based music education. Music Educators Journal, 83 (2), 19-26.

Pont, K. G. (1974). A philosophy of music education. In F. Callaway (Ed.),

International Society for Music Education: Challenges in music education (pp. 290-294).

Perth, Western Australia: General Printing.

Renyi, J. (1994). The arts and humanities in American education. Phi Delta Kappan, 75, 438-445.

Robinson, D. C. (1974). Supervision in music education: An effective catalyst in interdisciplinary co-operation. In F. Callaway (Ed.), International Society for Music Education: Challenges in music education (pp. 218-222). Perth, Western Australia: General Printing.

Ross, J. (1986). Who shall teach the arts? Design for Arts In Education, 87 (6), 9-11.

Ross, R. D. (1992). On the need for new partnerships in arts education. Design for Arts In Education, 93 (3), 28-33.

Sautter, R. C. (1994). An arts education school reform strategy. Phi Delta Kappan, 75, 433-437.

Schwadron, A. A. (1965). In defense of the special music teacher. Music Educators Journal, 52 (1), 62-64.

Schwartz, C. F. (1986). Public school music: Its origin and how it was taught. Design for Arts In Education, 87 (6), 25-27.

Siddell, K. R. (1974). Music for all. In F. Callaway (Ed.), International Society for Music Education: Challenges in music education (pp. 199-202). Perth, Western Australia: General Printing.

Southern, D. (1998). [West Virginia Education Information System--Harrison county]. Unpublished raw data.

Triola, M. F. (1995). Elementary statistics. New York: Addison-Wesley.

United States Department of Education. (1994). The arts and education reform: Ideas for schools and communities. Washington, DC: Department of Education. (ERIC Document Reproduction Service No. ED 365 621)

Vuolo, S. (1996). Status of the states teacher certification requirement for arts teachers [Online]. Available: <http://artsedge.kennedy-center.org/db/tm/pr/certreg.html>.

West Virginia Department of Education (1997). Music instructional goals and objectives. Charleston, WV.

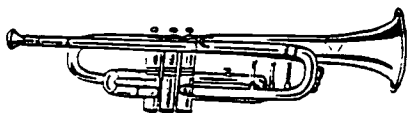
Zirkle, T. D. (1998). [West Virginia Education Information System--Marion county]. Unpublished raw data.

Appendix

Name _____ **SECOND GRADE POST-TEST**

INSTRUMENT FAMILIES--Write the family name of each instrument under its picture. Choose from the following:

string brass woodwind percussion



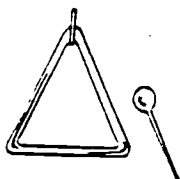
1. _____



2. _____



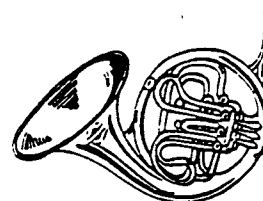
3. _____



4. _____



5. _____



6. _____

PENTATONIC SCALE--Write whole notes for the pentatonic scale above syllables below. The first one is done for you.



do

re

mi

sol

la



Test 4

- A. Choose S if the notes move by step.
 Choose R if the notes repeat.
 Circle your answers on your worksheet.

1.

S R

2.

S R

3.

S R

4.

S R

5.

S R

- B. Choose S if the notes move by step.
 Choose L if the notes leap.
 Circle your answers on your worksheet.

1.

S L

2.

S L

3.

S L

4.

S L


5.


S L




Test 5

Each set of lines shows a rhythm pattern.
Can you show the patterns with notes?

Use eighth notes——for the short
lines: — —

Use a quarter note——for each longer
line: ———

Use a half note——for each very long
line: —————

Write your notes above the lines on
your worksheet.

1. — — — —

2. — — —

3. — — — — —


4. — — — — —

5. — — — — —


NAME _____

FOURTH GRADE POST-TEST


MATCHING--In the space before each note or rest, write the letter of the correct note name.

___ 1. 

A. whole note

___ 2. 


B. dotted half note

___ 3. 


C. half note

___ 4. 


D. dotted quarter note

___ 5. 


E. quarter note

___ 6. 


F. one eighth note

___ 7. 


G. two eighth notes

___ 8. 


H. one sixteenth note

___ 9. 


I. four sixteenth notes

___ 10. 


J. whole rest

___ 11. 

K. half rest

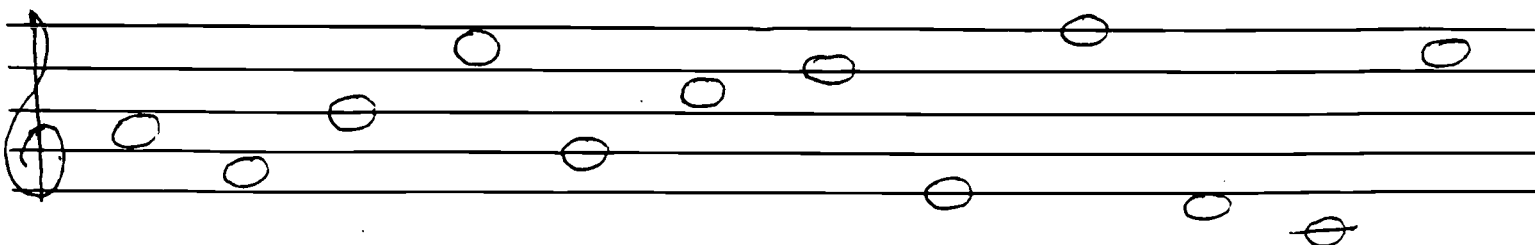
___ 12. 

L. quarter rest

___ 13. 

M. eighth rest

NOTE IDENTIFICATION--Write the letter name of each note in the blank below.





Test 6

A. Write the name of each instrument in the correct family.

violin

flute

trombone

bassoon

claves

viola

cymbals

maracas

trumpet

clarinet

oboe

tuba

string bass

cello

French horn

drum

STRING

1. _____

2. _____

3. _____

4. _____

WOODWINDS

1. _____

2. _____

3. _____

4. _____

BRASS

1. _____

2. _____

3. _____

4. _____

PERCUSSION

1. _____

2. _____

3. _____

4. _____

B. Read the sentences below. Write *T* if the sentence is true. Write *F* if the sentence is false.

1. String instruments are usually played with a bow. _____

2. Woodwind and brass instruments are played by blowing. _____

3. The instrument of the brass family that plays the lowest tones is the trumpet. _____

4. A tambourine can be played by striking and shaking. _____



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